1	22.	(original)	A data processing system having software stored in a set of
2			Computer Software Storage Media for accessing a first file on a disk system on
3			one of a plurality of computer systems from a program executing on another of
4			the plurality of computer systems, wherein:
5			the plurality of computer systems comprises:

6 a first computer system containing the program communicating through an
7 API with a first interface system, and
8 a second computer system containing the disk system and a second
9 interface system for communicating with the first interface system
10 and for reading from and writing to the disk system;
11 the first computer system and the second computer system are heterogeneous
12 computer systems;
13 said software comprising:
14 A) means for opening a first session from the program through the first interface
15 system to the second interface system in order to access the first file on the
16 disk system;
17 B) means for blocking the first plurality of records into a first plurality of blocks;
18 C) means for transmitting the first plurality of blocks over the first session from a
19 first one of the plurality of computer systems to a second one of the
20 plurality of computer systems;
21 D) means for unblocking the first plurality of blocks into a second plurality of
22 records on the second one of the plurality of computer systems; and
23 E) means for closing the first session after completing the transmitting in means
24 (D).

REMARKS

This amendment is presented in response to the Office Action mailed on September 30, 2004 for the purpose of placing the application for reconsideration and allowance. Claims 1-22 are active in the application. In response to the Examiner's request, Applicants have made minor changes to the specification for the purpose of updating the status of a related patent application which has issued into a patent and for the purpose of correcting typographical errors. In regard to the status of the related patent applications, Applicants have received an Office Action in another one of the related

applications. For the convenience of the Examiner, a copy of the list of cited prior art patents from the Office Action is included herein as an attachment. Applicants have also made minor amendments to the claims. The amendments to the claims correct typographical errors contained in the claims including an incorrect dependency...

Objections to Claims 6-7, 16-17 and 19-20

In response to the Examiner's objection to claims 6-7, 16-17 and 19-20, Applicants submit that a close review of the claims in question reveals that the claims are not conflicting with each other. As noted by the Examiner, the claims are directed to heterogeneous computer systems. This relationship is maintained in the objected to claims. For example, claim 6 depends on claim 5. Claim 5 recites that a 3rd plurality of records are blocked into a 2nd block and that the 2nd block is transmitted from a 3rd one of the plurality of computers to a 4th one of a plurality of computers. The claim further recites that the 2nd block is unblocked into a 4th plurality of records on the 4th one of the plurality of computers. Claim 6 objected to by the Examiner states that the 1st and the 3rd ones of the plurality of computers is the 1st computer system while the 2nd and 4th ones of the plurality of computers is the 2nd computer system. Both the 1st and 3rd ones of the plurality of computers are transmitting blocks to the 2nd and 4th ones of the plurality of computers respectively. Thus, the transmissions, blocking and unblocking operations always take place between heterogeneous computers. The same is true of claim 7.

Further evidence of the above is seen by an examination of substeps K through N of claims 6 and 7. For example, in claim 6, in substep K, the transmission of the first plurality of records during the first session is carried out by the 1st one of the plurality of computers and in substep L, the transmission of the third plurality of records during the second session is carried out by the 3rd one of the plurality of computers. Both the 1st and 3rd ones of the plurality of computers correspond to the first computer system. In substep M, the writing of the second plurality of records is carried out by the 2nd one of the plurality of computers and in substep N, the writing of the fourth plurality of records is carried out by the 4th one of the plurality of computers. Both the 2nd and 4th ones of the plurality of computers correspond to the second computer. Again, the transmission of records and writing of the transmitted records take place between pairs of heterogeneous computers.

If the Examiner deems it necessary, Applicants can amend the substeps K through N to recite which ones of the plurality of computers are carrying out the recited operations. However, Applicants respectfully submit that they deem that this should not be necessary. Another way of looking at the claims is to view at the first and second heterogeneous computer systems as including the specific ones of the plurality of computer systems. According, it is seen that each different pair of the plurality of computers is included in both the first and second heterogeneous computer systems. Hence, this relationship is maintained consistent with the teachings of the present invention. In view of the foregoing, Applicants ask the Examiner to reconsider the objection to these claims.

In response to the Examiner's comment regarding claims 19 and 20, Applicants have made these claims dependent on claim 11 and not claim 1, correcting the typographical error.

The amendments to the claims are essentially editorial in nature and were made for the purpose of consistency in the antecedents contained in the claims. As stated above, the amendments were not made in any way for the purpose of distinguishing over the prior art.

Claim Rejections under 35 USC § 102

Applicants traverse the Examiner's rejection of claims 1-3, 11-13, and 21-22 under 35 U.S.C. 102(b) as being anticipated by U.S Patent No. 6,714,968 to Prust (hereinafter Prust).

The Examiner Has Not Established a Prima Facie Case of Anticipation

The Examiner is required to show that each and every element as set forth in the claim is found in the Prust patent. Also, the Examiner must show that the identical invention is shown in as complete detail as contained in the claim and that the elements must be arranged as required by the claim.

Applicants traverse the Examiner statement that Prust teaches the invention as set forth in claim 1 directed to a method for accessing a first file on a disk system on one of a plurality of computer systems from a program executing on another of the plurality of computer systems utilizing first and second heterogeneous computer systems involving the operations of blocking a plurality of records into first plurality of blocks, transmitting

the blocks during a first session from the 1st one of a plurality of computers to a 2nd one of the plurality of computers which unblocks the transmitted blocks into a 2nd plurality of records after closing the first session.

By contrast, Prust is directed to a data storage system (e.g. storage servers) that provides virtual storage areas accessible via the standard file management routines that a client computer uses to manage local data files. Applicants find Prust absent first and second heterogeneous computer systems, the accessing of a first file in response to a program during a first session for the purpose of reading or writing plurality of records contained within such first file or the blocking of such plurality of records into blocks and the unblocking of such blocks into plurality of records by such heterogeneous computer systems in the manner set forth in claim 1. Applicants will now consider the basis of the Examiner's rejection of claim 1 relative to cited portions of the Prust patent.

Claim 1

The Examiner cites the Abstract of Prust which describes the data storage system discussed above that provides virtual storage areas accessible via a client computer through a window interface (e.g. browser) such as illustrated in Figure 6. The Examiner cites column 1, lines 49-67 that describe a data storage system containing virtual storage areas via a client computer that manages local data files. Further, the Examiner cites column 3, lines 22-40 and column 5, lines 60-63. Column 3 describes Figure 1 computer 100 and its processor 112 that can be implemented by the PENTIUM family of microprocessors, or other microprocessors such as the MIPS family of microprocessors, the POWERPC family of microprocessors, the PRECISION ARCHITECTURE family of microprocessors, the SPARC family of microprocessors or the ALPHA family of microprocessors. Column 5 describes Figure 3 window 300 as displayed by operating system 135 for accessing a virtual storage area 225 and that the operating system 135 is the Macintosh operating system.

Applicants submit that the above cited material does not indicate that there are heterogeneous computer systems in Prust. In fact, column 6 of Prust states that the client computers 205 is the Macintosh operating system that includes the Apple File Services (AFS) and the storage servers 225 are supporting accessing remote data files within storage virtual area 225 via Apple Filing Protocol (AFP) services. In other words, the

systems are not heterogeneous but functionally equivalent systems. The fact that different microprocessors (different hardware platforms) may be used in implementing a computer system does not establish the type of computer systems since different operating systems may be used on any number of different computer systems. In fact, the processor used in the embodiment of the present invention may also be implemented with different types of microprocessors.

The use of equivalent systems in Prust is also illustrated by the fact that Prust discusses that another embodiment shown in Figure 4 uses the Windows operating system which incorporates the SMB protocol to provide seamless access to the virtual storage area. Thus, in order to provide seamless access to files using the set of API routines for managing local data files, the systems must be functionally equivalent. Further, the background section of Prust discusses that prior art systems have limited modes for accessing data files such as for example, requiring a user to load proprietary software on their computers in order to communicate data files to the remote storage.

The Examiner cites column 1, lines 49-67 discussed above and column 5, lines 20-37. Column 5 discusses packetizing data files and metadata received from the management routines and communicates the data to the storage servers 210. The operating system 135 handles all communications with the storage servers such that the virtual storage area 225 can be accessed as if it were local to the client computer 205. According to Prust, the communications use TCP/IP as a base protocol and additionally use the HTTP protocol, the FTP protocol etc.

The fact that Prust suggests that it may use a FTP protocol should not be deemed equivalent of performing the steps in claim 1 of blocking a plurality of records, transmitting same, unblocking the blocks into a second plurality of records and closing the first session after completing the step of transmitting the blocks from a first one of the plurality of computer systems to a second one of the plurality of computer systems. Prust defines FTP as a networking protocol specifically for transporting **files** (not blocks of plurality of records) from one computer on the network to another while the Microsoft computer dictionary defines FTP as the protocol used for copying files to and from remote computer systems. There is no mention of blocking records let alone the steps set forth in claim 1. The cited material indicates the use of packets that clearly are not

equivalent to blocks of plurality of records. Thus, Prust deals with data at the file level and not with the elements of a specific file as indicated in claim 1. Further, there is no mention of sessions in the cited material let alone closing a session after the occurrence of a specific event (completing the transmitting step). Also, Applicants find that Prust is absent the use of an API or program for initiating access to a plurality of records within a file. Prust discloses an interface which is only capable of accessing files listed in directories (see Figure 6).

The absence of the above discussed elements and functions should be persuasive that Prust does not anticipate Applicants claim 1. A notice to this effect is respectfully solicited.

Claim 2

The Examiner cites column 1, lines 49-67 discussed above that pertains to having a user accessing a virtual storage area using the file management API routines provided by the operating system and the retrieving data files from the storage area. Again, Prust is concerned with accessing files and not plurality of records. Also, as discussed above, Applicants find Prust absent the use of an API or program for initiating access to records within a file. Therefore, Applicants submit that Prust does not provide for the receiving of the first plurality of records via the API or the writing of the second plurality of records to the first file as set forth in claim 2. Accordingly, claim 2 should be deemed patentable over the cited portions of the Prust patent. A notice to this effect is respectfully solicited.

Claim 3

The Examiner cites column 1, lines 56-61 discussed above and column 7, lines 42-56. Column 7 discusses remote processing via centrally hosted applications and that a user may submit data files for remote processing by instructing the operating system 135 to copy the data files to a designated directory within the virtual storage area 225. This clearly is a transfer of data files in a single direction. Applicants find no discussion or support of the Examiner's conclusion pertaining to the storage server running an application program and transferring data back to the client computer in the discussed material pertaining to remote processing cited by the Examiner, let alone in the manner

recited in claim 3. Accordingly, claim 3 should be deemed patentable over the cited portions of the Prust patent. A notice to this effect is respectfully solicited.

Claims 11 and 13 and 21-22

In view of the above discussion, Applicants submit that claims 11 and 13 and 21-22 should also be deemed patentable for the same reason set forth relative to claims 1-3 and 11. It is not clear as to the basis for the rejection of claim 11 since this claim is not discussed in the Office Action. Applicants assume that the Examiner intended to reject claim 11 on the same grounds as claim 1.

Claim Rejection - 35 U.S.C. § 103

Applicants submit that it is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill (see 147 USPQ at 393).

Claims 4 and 14

Applicants traverse the Examiner's rejection of claims 4 and 14 under 35 U.S.C. 103(a) as being unpatentable over Prust as applied to claims 1-3, 11-13 and 21-22 above further in view of Official Notice. The basis of the rejection is that (1) Prust fails to teach utilizing a credit based flow control mechanism to flow control the first plurality of blocks and utilizing a block based credit counting each of the first plurality of blocks as one credit, (2) Official Notice is taken that in a fee for service business model it is well known to **charge a client** according to the amount of data or traffic introduced by a service and (3) Official Notice is taken that utilizing a credit based flow control for limiting the number of transferred blocks is well known.

Applicants submit that the Examiner has not cited any reference defining the type of fee for service business model that is being officially noticed. Instead of providing any documentary evidence, the Examiner states what in the opinion of the Examiner is well-known in the art. Applicants submit that it is never appropriate to rely solely on "common knowledge" in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based. (see Zurko, 258 F.3d at 1385, 59 USPQ2d at 1697 cited in Section 2144.03 of the MPEP).

Thus, it is not possible to understand fully the relationship between charging a fee for traffic that would be like charging a fee for making cell phone transmissions and a method of controlling the transmission of data as set forth in claims 4 and 14. The fact the Prust may not provide a free service, should not be deemed sufficient basis for concluding that certain limitations on the file transfer could have been established as stated by the Examiner.

Applicants' claims are directed to data control such as the proper loading of data buffers and not to the charging of fees as stated by the Examiner. As discussed herein, the user of the client computer that accesses a virtual storage area via a browser or FTP utility is required to make a request after each transmission that determines the flow of data. Therefore, Applicants find no motivation to utilize any flow mechanism in the Prust system, let alone the one defined in Applicants claims. In fact, Applicants submit that it would be contrary to the teachings of Prust. Accordingly, Applicants submit that claims 4 and 14 should be deemed patentable over Prust and the undefined fee for service business model stated by the Examiner. A notice to this effect is respectfully solicited.

Claims 5-8 and 15-18

Applicants traverse the Examiner's rejection of claims 5-8 and 15-18 under 35 U.S.C. 103(a) as being unpatentable over Prust as applied to claims 1-4, 11-14 and 21-22 above. Applicants submit for the reasons given above, claims 5-8 and 15-18 should be deemed patentable.

Claims 5-7

Additionally, as to claims 5-7, Applicants submit that the fact that the system cited by the Examiner as using a HTTP protocol as file transferring protocol makes it difficult to understand how this suggests the use of multiple sessions. It is well known that the HTTP protocol (hypertext transfer protocol) is one wherein an HTTP server is used to serve up HTML documents when requested by a client. It is further known that **the connection** between the client and server is usually **broken after the requested document or file has been transferred** (see Microsoft Computer Dictionary). Accordingly, in standard Internet browsing, connections are continually being made in response to client requests and broken before further transfers (upload or down load) can take place. That is, the current version of HTTP establishes a connection each time a

client request is made. Therefore, Applicants find that it is not possible to conduct multiple TCP sessions as suggested by the Examiner, let alone in the manner set forth by claims 5-7. Further, Prust does not provide facilities or any suggestion of conducting more than one session at a time. Other than the Examiner's suggestion of providing multiple sessions, Applicants find that there is no motivation for providing more than one session at a time. In view of the above, Applicants submit that claims 5-7 should be deemed patentable and a notice to this effect is respectfully solicited.

Claim 8

The Examiner cites column 3, lines 23-40, column 9, lines 1-15 and column 8, lines 8-22 in addition to column 5, lines 34-37 and Figure 6. Column 3 discussed above indicates the use of different microprocessors for implementing computer 100. Column 9 contains claims 8-10 which are directed to the configuration of a web browser, a FTP utility, supporting WebDAV for accessing data files and an API that supports SMB protocol. Column 8 discusses the described seamless access to remote virtual data storage areas via a global computer network. Column 5 contains a similar discussion and Figure 6 illustrates a window 600 displayed by a conventional web browser when a user accesses a virtual storage area and lists each directory within the virtual storage area 225.

It is clear from the above that Prust uses standard browser/ internet/HTTP servers that may be interconnected. Further, Prust in column 3, lines 37-40 specify that computer 100 represents any server, personal computer, laptop or even a battery powered pocket sized, mobile computer known as a hand held PC or PDA. . Further, the background section of Prust discusses that prior art systems have limited modes for accessing data files such as for example, requiring a user to load proprietary software on their computers in order to communicate data files to the remote storage.

Therefore, Applicants find that it would be contrary to the teachings of Prust and that there is no motivation to utilize mainframe proprietary computers, let alone the arrangement set forth in claim 8. Accordingly, claim 8 should be deemed patentable over the proposed combination suggested by the Examiner. A notice to this effect is respectfully solicited.

Claims 15-18

For the reasons given regarding claims 1, 5-8 and 11, claims 15-18 should also be deemed patentable. A notice to this effect is respectfully solicited.

Claims 9-10 and 19-20

Applicants traverse the Examiner's rejection of claims 9-10 and 19-20 under 35 U.S.C. 103(a) as being patentable over Prust as applied to claims 1-8, 11-18 and 21-22 above, further in view of Applicant admitted prior art.

Claims 9 and 10

Applicants' specification at page 2, lines 24-32 as noted by the Examiner, discusses Figure 2 as illustrating file reading and writing across heterogeneous systems in the prior art such as an FTP operation wherein any necessary translations between the two systems are performed by two utility programs. Further, as discussed above, Prust does not show or suggest the use of heterogeneous computers. Therefore, Applicants submit that there is no motivation to perform any data conversion operations let alone the type of conversion specified in claims 9 and 10. As noted by the Examiner, in Prust, client and server computers use compatible file handling systems eliminating the need for any data transformation. Accordingly, claims 9 and 10 should be deemed patentable and a notice to this effect is respectfully solicited.

Claims 19 and 20

For the same reasons given relative to claims 1 and 9-10, Applicants submit that claims 19 and 20 should also be deemed patentable. A notice to this effect is respectfully solicited.

In view of the above arguments and amendment corrections, Applicants submit that claims 1-22 should be deemed patentable over the cited prior art. A notice to this effect is respectfully solicited.

Applicants ask the Examiner to contact Applicants attorney to discuss any other grounds for rejecting Applicants claims before acting on this amendment. Further, if any questions or issues should arise with respect to this amendment or the allowability of this application, the Examiner is **urged** to **call Applicants' attorney at the number indicated herein**. Further, if the Examiner feels that a discussion will further advance the prosecution of this application, the Examiner is also **urged** to call as suggested herein.
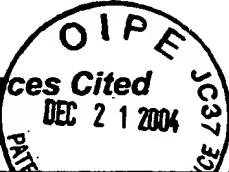
Respectfully submitted,

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Enc: Attachment
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ATTACHMENT

Notice of References Cited		Application/Control No. 09/896,699		Applicant(s)/Patent Under Reexamination ROSENSTEEL ET AL.	
		Examiner Avi Gold		Art Unit 2157	Page 1 of 1

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	Q					
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
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	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
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